STATE OF MAINE
PUBLIC UTILITIES COMMISSION

DOCKET NO. 97-861

DECEMBER 2, 1997

PUBLIC UTILITIES COMMISSION
Inquiry into the Energy and
Load Profiling and Settlement
Functions of Transmission and
Distribution Utilities in a
Restructured Electric Industry

NOTICE OF INQUIRY

WELCH, Chairman; NUGENT and HUNT, Commissioners

I. SUMMARY

In this Notice, we initiate an inquiry to obtain information on the load profiling and settlement functions that might be necessary for regulated transmission and distribution (T&D) utilities to provide efficient retail access without expensive metering and communications equipment.

II. BACKGROUND

The Legislature recently enacted legislation[1] that grants, effective March 1, 2000, all consumers of electricity the right to purchase generation services from competitive electricity providers. We initiate this Inquiry to consider methods to estimate the hourly energy and demand requirements of electricity customers in a retail access environment. Such methods are often referred to generically as "load profiling," but there are no methodological standards. As explained below, load profiling appears necessary to supplement existing metering and communications technologies for providing the hourly and daily customer load information that will be required to implement retail competition.

When retail competition begins, Load Serving Entities (LSEs) in Maine will have to coordinate with Independent System Operator New England Inc. (ISO) to schedule generator dispatch[2] and transmission services. Each day, LSEs will notify the ISO of its expected loads for the following day and the generators that will be dispatched to serve them. Thirty-six hours after that day, LSEs must provide the ISO with actual hourly energy consumption figures. The ISO will use the actual consumption information to

[1] "An Act to Restructure the State's Electric Industry" (ACT). P.L. 1997, Ch. 316.
[2] In New England generator dispatch and transmission scheduling services for the entire region are performed through the newly created ISO.

perform its monthly energy settlement process. Relatively few power meters in Maine provide the hourly information necessary for the ISO settlement process[3]. Fewer still are equipped with communications technologies that will allow timely communication of the data. We expect that when retail competition begins in Maine there will be only two existing sources of the hourly information. The first will be the bulk power delivery meters at the interfaces of the T&D utilities service territories. The second will be from large customers who already have sophisticated metering technology and for whom the added communications costs are economically justified. When actual hourly energy consumption figures are reported to the ISO, the sum of smaller customers' estimated loads and measured loads of larger customers must equal the readings of the bulk power delivery meters. In this inquiry we consider establishing a process to ensure that this occurs.

III. ISSUES FOR COMMENT

We invite interested persons to comment on the following issues, and on any additional issues the Commission should address in this proceeding.

A. Existing Investor and Consumer Owned Electric Utilities:

1. Where are the physical locations of the bulk power meters on your system?

2. Please discuss the state of your existing load research data:

   a. Describe any existing hourly data or ongoing load research that would enable you to estimate the coincident and non-coincident peak energy consumption of all of your existing customer classes;

   b. Describe the vintage, level of detail, and quality of the data;

   c. Indicate whether your load data for each of these customer classes or subgroups include historic actual daily and hourly usage for an entire weather normalized year;

[3] In the monthly settlement process, the ISO administers the billing process which assures that energy producers are paid for their production by those who consumed or sold it.

d. Do you have load data that would allow you to estimate the hourly coincident peak energy consumption of customers aggregated into groups other than existing customer classes (e.g. electric space and water heat, lighting, grocery store, etc.); and

e. How many existing customer electric meters are on your system and what percent of your total load have the capability to produce hourly reads? How many of these are telemetered?

B. For all Interested Persons:

1. What number of customer subgroups would provide the most economically appropriate level of detail?

2. What is the best method to reconcile the hourly and daily estimated loads of unregulated LSEs to the actual bulk power meter readings of the regulated T&D utility companies? Why?

3. Should differences between actual periodic readings of customer meters and the estimates used in the settlement process be reconciled? if so, how should this be done?

4. Should T&D utilities furnish LSEs with a day ahead forecast of loads? Should this service be paid for by T&D ratepayers, or should it be provided as a fee based service to competitive LSEs?

5. How should the loads of customers who have hourly meter reading capability be incorporated into the load estimation process?

6. Are there situations in which the release of customer load profile data could trigger confidentiality concerns? If so, how should this be resolved?

7. Would there be any unique problems for LSEs transacting business in parts of Maine that are not electrically contiguous with the NEPOOL system (i.e. would it be a problem making these sorts of transactions through the New Brunswick Power Pool)?

8. How frequently should load profiles be adjusted?

9. Are separate load profiles necessary for each existing utility service territory, or can statewide generic load profiles be developed?

10. What entity is responsible for the accuracy of estimates?

11. Are there any problems associated with T&D company's administering the load profile estimation process if it is also engaged (through an affiliate) in the provision of competitive LSE services?

12. Should a formal dispute resolution process be established as part of this investigation and rulemaking? Please provide as much definition of the process as you can.

Interested persons may participate in this inquiry by filing a letter stating their interest in this proceeding no later than December 15, 1997. The letter should be addressed to Dennis L. Keschl, Administrative Director and include the docket number, Docket No. 97-861. The Commission will then issue a service list. All subsequent filings must be served to all interested parties on the service list. Interested persons may file substantive comments by January 22, 1998. We will convene a meeting with parties on February 11, 1998, to discuss the comments received. We will initiate a formal rulemaking before May 30, 1998.

Accordingly, We

O R D E R

1. That an inquiry shall be opened as described in the body of this Notice;

2. That this Notice shall be sent to all electric utilities in the State of Maine;

3. That this Notice shall be sent to parties who have shown an interest in the provision of retail electric service;

4. That this Notice shall be sent to the service list of electric restructuring, Docket No. 95-462; and

5. That this Notice of inquiry will also be posted on the Commission's website, http://www/state.me.us/mpuc

Dated at Augusta, Maine this 2nd Day of December 1997.

BY ORDER OF THE COMMISSION

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Dennis L. Keschl
Acting Administrative Director

COMMISSIONERS VOTING FOR: Welch
Nugent
Hunt